

**Notice of Allowability**

Application No.

10/607,899

Applicant(s)

JACKSON, ANDREW W.

Examiner

Art Unit

Tuan N. Nguyen

2828

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 03/24/2005.
2. ☒ The allowed claim(s) is/are 1-12, 14-16 and 27-42.
3. ☐ The drawings filed on \_\_\_\_\_ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☒ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date 5/9/2005.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 5/6/2005.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

**DETAIL ACTION**

***Response to Amendment***

1. In responding to applicant's response filed 03/24/2005, claim 1 has been amended, claims 13, and 17-26 have been canceled, and claims 27-42 have been added.

**DRAWING**

2. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because Figures 1-5 draft are not acceptable. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

**EXAMINER'S AMENDMENT**

3. An examiner's amendment to the record appears below, to the amended claim 1 should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Stephen J. Holmes (Attorney for Applicant, Reg. No. 34,621) on 05/6/2005.

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1. (Currently amended) An apparatus comprising:  
a VCSEL (vertical cavity surface emitting laser) formed on a top surface of a substrate that is transmissive to light emitted by the VCSEL;  
a photodetector disposed facing an opposed bottom surface of the substrate and capable of detecting light emitted by the VCSEL; and  
an angular filter disposed between the bottom surface and a detecting surface of the photodetector, ~~and~~  
said angular filter being capable of allowing only light which reaches the angular filter within a limited range of angles to reach the photodetector,  
said angular filter being mounted one of on and within a further member disposed between the bottom surface of the substrate and the photodetector.

#### REASON FOR ALLOWANCE

##### *Allowable Subject Matter*

4. The following is an examiner's statement of reasons for allowance - with respect to claims 1, and 27, the references of the record fail to teach or suggest:

##### **Claims 1, 27:**

An apparatus comprising VCSEL formed on top of a substrate, having photodetector and *angular filter or filter means disposed between the bottom substrate and photodetector*, where the *photodetector is facing the oppose bottom surface of the substrate*, wherein the angular filter *being mounted on and within a further member*, allowing only light reaches the angular filter within a limited ranges to reach the photodetector.

#### Communication Information

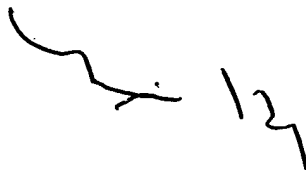
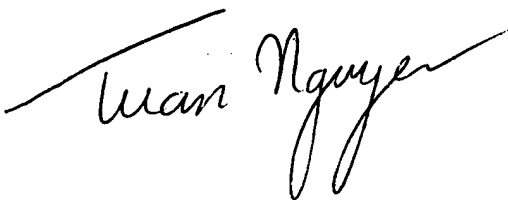
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan N Nguyen whose telephone number is (571) 272-1948. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harvey Minsun can be reached on (571) 272-1835. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tuan N. Nguyen



MIN SUN CUI HARVEY  
PRIMARY EXAMINER